

PROFESSIONAL SERVICES AGREEMENT
for
Design of Holford's Prairie Road Improvements
(Between SH 121 Business and Corporate Drive)

The City of Lewisville, Texas (the "City"), hereby engages Teague Nall and Perkins, Inc. (the "Consultant"), to perform professional services in connection with the design of Holford's Prairie Road Improvements (the "Project").

I. PROJECT. The Project is described as follows:

- A. The Project will consist of design of Holford's Prairie Road as a 37' B-B undivided street in a 60' right-of-way with 5' sidewalks, between SH 121 Business and the future Corporate Drive, along with necessary support services as outlined below. The design will be based on the Preliminary Design Report previously completed by the Consultant. The project area is generally as shown on the attached Attachment "F".

II. SCOPE OF SERVICES. The Scope of Services for the Project shall generally include:

- A. Preparation of a Design Survey, including setting of benchmarks and control
- B. Subsurface Utility Engineering (SUE) services including Level B designating and Level A test holes.
- C. Preparation of construction plans for Roadway, Culvert and Storm Drain, for review at 30%, 60%, 90% and 100% design stages
- D. Force Main (Design by others) to be incorporated into construction project
- E. Preparation of Final Construction Plans for Bidding
- F. Preparation of documents for submittal to TxDOT for permitting of the intersection improvements at SH 121 Business
- G. Preparation of a Letter of Map Revision (LOMR) for submittal to FEMA for improvements at Midway Branch.
- H. Preparation of Environmental Documents, consisting of:
 - 1. A Jurisdictional Waters Delineation at Midway Branch
 - 2. A Preconstruction Notification (PCN) for a US Army Corps of Engineers 404 Nationwide Permit
 - 3. A Threatened and Endangered Species Report for submittal with the LOMR
- I. Public Meetings (two assumed)
- J. Preparation of seven (7) drainage easements, nine (9) right-of-way documents, sixteen (16) temporary construction easements, seven ALTA surveys for property acquisition, and six (6) slope easements

- K. Construction Staking of street, drainage, and sewer improvements
- L. Bidding, Construction and Closure Support

A more detailed description of specific services to be provided is contained in Attachment 'B', which is hereby included in this Professional Services Agreement by reference.

III. COMPENSATION. Compensation for the Project shall be as outlined in Attachment "C", and shall not exceed **\$453,285.00**.

Invoices shall be submitted by cover letter from the project engineer. The letter shall certify that the invoice properly represents work actually done. The City reserves the right to request additional justification prior to payment of any invoice. If satisfactory justification is not received, the City reserves the right to amend the invoice or to refuse to make payment without incurring penalty or interest. Invoices shall be based on percentage of work completed per identifiable unit of work. The City agrees to make prompt payments for all approved invoices and agrees to pay interest at the rate approved by law for approved invoices not paid within 30 days from the date of approval.

IV. INSURANCE. The Consultant agrees to maintain insurance throughout the term of the contract, in accordance with Attachment "A". All Certificates of Insurance shall be kept current and shall be forwarded to the Purchasing Division of the City by cover letter from the Consultant. Insurance certificate must be received and approved prior to commencement of work. The Consultant shall also review and forward certificates covering sub-consultants.

V. REUSE OF DOCUMENTS. All documents, including drawings and specifications prepared by the Consultant pursuant to this Agreement, are instruments of service in respect of the Project. They are not intended or represented to be suitable for reuse by the City or others on extensions of the Project or on any other project. Any reuse without written verification or adaptation by the Consultant for the specific purpose intended will be at City's sole risk and without liability or legal exposure to the Consultant from all claims, damages, losses and expenses including attorneys fees arising out of or resulting therefrom. Any such verification or adaptation will entitle the Consultant to further compensation at rates to be agreed upon the City and the Consultant.

VI. OWNERSHIP OF DOCUMENTS. Original documents, plans, designs, reports and survey notes developed in connection with services performed hereunder belong to, and remain the property of the City, in consideration of which it is mutually agreed that the City will use them solely in connection with the Project, save with the express consent of the Consultant. The Consultant shall retain reproducible copies or electronic files of such documents for at least five (5) years and shall furnish copies to the City for reimbursable costs, if so requested.

VII. THE CONSULTANT AGREES TO DEFEND, INDEMNIFY AND HOLD THE CITY, ITS OFFICERS, AGENTS AND EMPLOYEES, HARMLESS AGAINST ANY AND ALL CLAIMS, LAWSUITS, JUDGMENTS, COSTS AND EXPENSES FOR PERSONAL INJURY (INCLUDING DEATH), PROPERTY DAMAGE OR OTHER

HARM FOR WHICH RECOVERY OF DAMAGES IS SOUGHT, SUFFERED BY ANY PERSON OR PERSONS, THAT IS CAUSED BY OR RESULTS FROM ANY NEGLIGENT ACT OR OMISSION, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY CONSULTANT, ITS AGENT, EMPLOYEE, CONSULTANT UNDER CONTRACT, OR ANY OTHER ENTITY OVER WHICH THE CONSULTANT EXERCISES CONTROL, IN THE PERFORMANCE OF THIS AGREEMENT; EXCEPT THAT THE INDEMNITY AND DEFENSE PROVIDED FOR IN THIS PARAGRAPH SHALL NOT APPLY TO ANY LIABILITY RESULTING FROM THE SOLE NEGLIGENCE OR FAULT OF THE CITY, ITS OFFICERS, AGENTS, EMPLOYEES OR SEPARATE CONSULTANTS OR CONTRACTORS, AND IN THE EVENT OF JOINT AND CONCURRING NEGLIGENCE OR FAULT OF THE CONSULTANT AND THE CITY, RESPONSIBILITY AND INDEMNITY, IF ANY, SHALL BE APPORTIONED IN ACCORDANCE WITH THE LAW OF THE STATE OF TEXAS, WITHOUT WAIVING ANY GOVERNMENTAL IMMUNITY AVAILABLE TO THE CITY UNDER TEXAS LAW AND WITHOUT WAIVING ANY DEFENSES OF THE PARTIES UNDER TEXAS LAW. THE DUTY TO DEFEND SHALL NOT APPLY IN THE CASE OF A CLAIM BASED WHOLLY OR PARTLY ON THE NEGLIGENCE OF, FAULT OF, OR BREACH OF CONTRACT BY THE CITY, ITS AGENTS OR EMPLOYEES, OR OTHER ENTITY (EXCLUDING THE CONSULTANT OR ITS AGENT, EMPLOYEE, CONSULTANT UNDER CONTRACT, OR ANY OTHER ENTITY OVER WHICH THE CONSULTANT EXERCISES CONTROL) OVER WHICH THE CITY EXERCISES CONTROL, IN WHICH INSTANCE THE CITY'S REASONABLE ATTORNEY'S FEES SHALL BE REIMBURSED BY CONSULTANT IN PROPORTION TO THE CONSULTANT'S LIABILITY. THE PROVISIONS OF THIS PARAGRAPH ARE SOLELY FOR THE BENEFIT OF THE PARTIES HERETO AND NOT INTENDED TO CREATE OR GRANT ANY RIGHTS, CONTRACTUAL OR OTHERWISE, TO ANY OTHER PERSON OR ENTITY.

- VIII. TIME OF COMPLETION.** A project schedule, shown in Attachment "E" is hereby included in this Professional Services Agreement by reference. The Consultant agrees to perform the services in accordance with the schedule, to the extent over which the Consultant has control.
- IX. TERMINATION.** This Agreement may be terminated without cause at any time prior to completion of the Consultant's services by the City, or by the Consultant with cause, upon seven days written notice to the City at the address of record. Termination shall release each party from all obligations of this Agreement, except those outlined in Paragraphs V, VI and VII above. Upon notice of termination, the Consultant shall prepare and submit to City a final invoice within 15 days.
- X. CONFIDENTIAL INFORMATION.** To the extent allowed by law, the City will safeguard and keep from release any documents marked "proprietary" or information not generally available to the public. However, the City will, if required, comply with all

requirements of the Texas Public Information Act with regard to any documents in its possession at the time of a request made under that Act.

- XI. GOVERNING LAW AND VENUE.** This Agreement is governed by the laws of the State of Texas. Exclusive venue for any dispute arising out of this Agreement is in Denton County, Texas.
- XII. ARBITRATION.** In the event of a dispute which may arise under this Agreement, the City does not agree to arbitration.
- XIII. PROTECTION OF RESIDENT WORKERS.** The City of Lewisville actively supports the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, employers may hire only persons who may legally work in the United States (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the U.S. The employer must verify the identity and employment eligibility of anyone to be hired, which includes completing the Employment Eligibility Verification Form (I-9). The Consultant shall establish appropriate procedures and controls so no services under the Contract Documents will be performed by any worker who is not legally eligible to perform such services or employment. The City reserves the right to audit consultant's employment records to verify the existence of a completed Employment Eligibility Verification Form (I-9) for every worker performing services under the Contract Documents. The audit will be at the City's expense.
- XIV. IMMIGRATION REFORM AND CONTROL ACT (8 U.S.C. §1324a).** The City of Lewisville supports the Immigration Reform and Control Act (IRCA) which is a comprehensive scheme prohibiting the employment of unauthorized aliens in the United States. The Consultant shall submit a declaration signed under penalty of perjury of the laws of the State of Texas stating that it has not been found in violation of IRCA by the United States Attorney General or Secretary of Homeland Security in the preceding five (5) years. The Consultant shall ensure that its Subcontractors submit a declaration signed under penalty of perjury of the laws of the State of Texas stating that they have not been found in violation of IRCA by the United States Attorney General or Secretary of Homeland Security in the preceding five (5) years. The Consultant and its Subcontractors shall at all times during the term of the contract with the City comply with the requirements of IRCA and shall notify the City within fifteen (15) working days of receiving notice of a violation of IRCA. The City may terminate a contract with the Consultant if the City determines that (a) the Consultant or its Subcontractors have been untruthful regarding IRCA violations in the preceding five (5) years; (b) if the Consultant fails to ensure that its Subcontractors submit the aforementioned declaration; or (c) the Consultant or its Subcontractors fail to timely notify the City of an IRCA violation.
- XV. ADA COMPLIANCE.** All goods and services provided to the City must be compliant with the Americans with Disabilities Act ("ADA") and all regulations promulgated pursuant to the ADA. Consultant will be required to certify compliance, if applicable.

XVI. SUCCESSORS AND ASSIGNS. The City and Consultant each binds itself and its partners, successors, executors, administrators and assigns to the other party of this Agreement and to partners, successors, executors, administrators and assigns of each other in party in respect to all covenants of this Agreement. Neither the City nor the Consultant shall assign, sublet or transfer its interest in this Agreement without the written consent of the other. Nothing herein shall be construed as giving any right or benefits hereunder to anyone other than the City and the Consultant.

XVII. DISCLOSURE. Pursuant to Chapter 176 of the Texas Local Government Code, a person or agent of a person who contracts or seeks to contract with the City of Lewisville must complete a conflict of interest questionnaire if the person or agent has an affiliation or business relationship that might cause a conflict of interest with the City. The conflict of interest questionnaire, which is available online at ethics.state.tx.us, must be filed with the City Secretary of the City of Lewisville no later than the seventh business day after the person or agent begins contract discussions or negotiations with the City of Lewisville or submits to the City of Lewisville an application, response to a request for proposal or bid, correspondence, or another writing related to a potential agreement with the City of Lewisville. An updated conflict of interest questionnaire must be filed in accordance with Chapter 176 of the Local Government Code.

Said person should consult with legal counsel if they have questions regarding its compliance with the requirements of Chapter 176. It is the responsibility of each person or agent who is contracting or seeking to contract with the City of Lewisville to comply with the filing requirements of Chapter 176.

XVIII. TEXAS GOVERNMENT CODE CHAPTER 2270. Pursuant to Texas Government Code Chapter 2270, Contractor affirms that execution of this Agreement serves as written verification that Contractor: (1) does not boycott Israel, as defined by Texas Government Code Section 808.001; and (2) will not boycott Israel during the term of the Agreement.

XIX. TEXAS GOVERNMENT CODE CHAPTER 2252. Pursuant to Texas Government Code Chapter 2252, Subchapter F, Contractor affirms, by entering into this Agreement, that it is not identified on a list created by the Texas Comptroller of Public Accounts as a company known to have contracts with or provide supplies or services to Iran, Sudan, or a foreign terrorist organization.

XX. PERFORMANCE: In compliance with Texas Local Government Code 271.904, the Contractor agrees to perform the services outlined herein with the professional skill and care ordinarily provided by competent engineers practicing under the same or similar circumstances and professional license; and to perform the services outlined herein as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer, under the schedule as referenced in Section VIII of this Agreement.

XXI. CLOSURE. By signature below, the parties to this Agreement hereby bind themselves to the terms stated herein, including all attachments referred to herein.

CITY OF LEWISVILLE, TEXAS
Approved by the Lewisville City
Council _____

By: _____
Donna Barron, City Manager

Date: _____

Attest: _____
Julie Worster

By: _____
Gary L. Vickery, P.E., Principal

Date: _____

Attest: _____
Cathy Skipper

CITY OF LEWISVILLE
151 West Church Street
Lewisville, Texas 75057

Teague Nall and Perkins, Inc.
1517 Centre Place Drive, Suite 320
Denton, TX 76205

APPROVED AS TO FORM:

Lizbeth Plaster, City Attorney

ATTACHMENT A
INSURANCE REQUIREMENTS
ENGINEERING/ARCHITECTURE PROJECTS

Vendor shall procure and maintain for the duration of the contract, insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the vendor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Vendor's bid.

A. MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

1. Insurance Services Office Commercial General Liability coverage "occurrence" form CG 00 01 (10 01). **"Claims Made" form is unacceptable except for professional liability.**
2. Workers' Compensation insurance as required by the Labor Code of the State of Texas, including Employers' Liability Insurance.
3. Automobile Liability – as required by the State of Texas, covering all owned, hired, or non-owned vehicles. Automobile Liability is only required if vehicle(s) will be used under this contract. Coverage not required for delivery services.
4. Professional Liability and/or Errors and Omissions Insurance.

B. MINIMUM LIMITS OF INSURANCE

Vendor shall maintain throughout contract limits not less than:

1. Commercial General Liability: \$500,000 per occurrence/\$1,000,000 aggregate for bodily injury, personal injury and property damage. Policy will include coverage for:
 - a. Premises – Operations
 - b. Broad Form Contractual Liability
 - c. Products and Completed Operations
 - d. Use of Contractors and Subcontractors
 - e. Personal Injury
 - f. Broad Form Property Damage
 - g. If applicable, Explosion Collapse and Underground (XCU) Coverage (when applicable, Fire Damage, Medical Expense).

NOTE: The aggregate loss limit applies to each project.

2. Workers' Compensation and Employer's Liability: Workers' Compensation Statutory limits as required by the Labor Code of the State of Texas and Employer's Liability minimum limits of \$500,000 per injury, \$500,000 per occurrence, and \$500,000 per occupational disease.
3. Automobile Liability - \$500,000 Combined Single Limit. Limits can only be reduced if approved by the HR Director or designee.
4. Professional Liability and/or Errors and Omissions - \$500,000 per occurrence - \$1,000,000 Aggregate.
5. Builders' Risk Insurance (as applicable) – Completed value form, insurance carried must equal the completed value of the structure.

C. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductible or self-insured retentions must be declared to and approved by the City.

D. OTHER INSURANCE PROVISIONS

The policies are to contain, or be endorsed to contain the following provisions:

1. General Liability and Automobile Liability Coverages
 - a. The City, its officers, officials, employees, Boards and Commissions and volunteers are to be added as "Additional Insured" as respects liability arising out of activities performed by or on behalf of the vendor, products and completed operations of the vendor, premises owned, occupied or used by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officers, officials, employees or volunteers. It is understood that the business auto policy under "Who is an Insured" automatically provides liability coverage in favor of the City.
 - b. The vendor's insurance coverage shall be primary and non-contributory insurance as respects the City, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees or volunteers shall be excess of the vendor's insurance and shall not contribute with it.
 - c. Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the City, its officers, officials, and employees, Boards and Commissions or volunteers.
 - d. The vendor's insurance shall apply separately to each insured against whose claim is made or suit is brought, except to the limits of the insured's liability.
2. Waiver of Subrogation – All Coverages except Professional Liability
Each insurance policy required by this exhibit except Professional Liability shall waive all rights of subrogation against the City, its officers, officials, employees, and volunteers for losses arising from work performed by the vendor for the City.
3. Notice of Cancellation - All Coverages
Each insurance policy required by this exhibit shall be endorsed to state that coverage shall not be suspended, voided, canceled or non-renewed by either party, reduced in coverage or in limits except

after thirty (30) days prior written notice by certified mail, return receipt requested, has been given the City, or ten (10) days prior written notice for non-payment of premium.

4. Professional Liability (applicable only to certified or licensed Engineers and or Architects)
“Claims made” policy is acceptable coverage which must be maintained during the course of the project and up to two (2) years after completion and acceptance of the project by the City.

E. ACCEPTABILITY OF INSURERS

The City prefers that Insurance be placed with insurers with an A.M. Best’s rating of no less than **A-:VI, or, A or better** by Standard and Poors. Professional Liability carriers will need to be approved by the HR Director or designee.

F. VERIFICATION OF COVERAGE

Contractor shall furnish the City with certificates of insurance affecting coverage required. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. Certificates of Insurance must be provided on forms approved by the Texas Department of Insurance. City will not accept Memorandums of Insurance or Binders as proof of insurance. The City reserves the right to require complete, certified copies of all required insurance policies at any time.

G. HOLD HARMLESS AND INDEMNIFICATION

THE CONSULTANT AGREES TO DEFEND, INDEMNIFY AND HOLD THE CITY, ITS OFFICERS, AGENTS AND EMPLOYEES, HARMLESS AGAINST ANY AND ALL CLAIMS, LAWSUITS, JUDGMENTS, COSTS AND EXPENSES FOR PERSONAL INJURY (INCLUDING DEATH), PROPERTY DAMAGE OR OTHER HARM FOR WHICH RECOVERY OF DAMAGES IS SOUGHT, SUFFERED BY ANY PERSON OR PERSONS, THAT IS CAUSED BY OR RESULTS FROM ANY NEGLIGENT ACT OR OMISSION, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY CONSULTANT, ITS AGENT, EMPLOYEE, CONSULTANT UNDER CONTRACT, OR ANY OTHER ENTITY OVER WHICH THE CONSULTANT EXERCISES CONTROL, IN THE PERFORMANCE OF THIS AGREEMENT; EXCEPT THAT THE INDEMNITY AND DEFENSE PROVIDED FOR IN THIS PARAGRAPH SHALL NOT APPLY TO ANY LIABILITY RESULTING FROM THE SOLE NEGLIGENCE OR FAULT OF THE CITY, ITS OFFICERS, AGENTS, EMPLOYEES OR SEPARATE CONSULTANTS OR CONTRACTORS, AND IN THE EVENT OF JOINT AND CONCURRING NEGLIGENCE OR FAULT OF THE CONSULTANT AND THE CITY, RESPONSIBILITY AND INDEMNITY, IF ANY, SHALL BE APPORTIONED IN ACCORDANCE WITH THE LAW OF THE STATE OF TEXAS, WITHOUT WAIVING ANY GOVERNMENTAL IMMUNITY AVAILABLE TO THE CITY UNDER TEXAS LAW AND WITHOUT WAIVING ANY DEFENSES OF THE PARTIES UNDER TEXAS LAW. THE DUTY TO DEFEND SHALL NOT APPLY IN THE CASE OF A CLAIM BASED WHOLLY OR PARTLY ON THE NEGLIGENCE OF, FAULT OF, OR BREACH OF CONTRACT BY THE CITY, ITS AGENTS OR EMPLOYEES, OR OTHER ENTITY (EXCLUDING THE CONSULTANT OR ITS AGENT, EMPLOYEE, CONSULTANT UNDER CONTRACT, OR ANY OTHER ENTITY OVER WHICH THE CONSULTANT EXERCISES CONTROL) OVER WHICH THE CITY EXERCISES CONTROL, IN WHICH INSTANCE THE CITY’S REASONABLE ATTORNEY’S FEES SHALL BE REIMBURSED BY CONSULTANT IN PROPORTION TO THE CONSULTANT’S LIABILITY. THE PROVISIONS OF THIS PARAGRAPH ARE SOLELY FOR THE BENEFIT OF THE PARTIES HERETO AND NOT

INTENDED TO CREATE OR GRANT ANY RIGHTS, CONTRACTUAL OR OTHERWISE, TO ANY OTHER PERSON OR ENTITY.

ATTACHMENT “B” SERVICES
For
Design of Holford’s Prairie Road Improvements
(SH 121 Business to future Corporate Drive)

This Attachment “B” further defines the services to be performed by Teague, Nall, and Perkins in conjunction with the Holford’s Prairie Road Improvements Project.

The project generally consists of design of roadway improvements for Holford’s Prairie Road, between SH 121 Business and future Corporate Drive (approximately 3,325 feet), and improvements to Oak Tree Lane, as depicted on the attached exhibit, along with drainage improvements that include a culvert at Midway Branch. Other support services will include environmental services, preparation of a Letter of Map Revision, easement and right-of-way exhibits, construction staking and limited construction support. The scope of this effort is based on the Preliminary Design Report (PDR) prepared by Teague Nall and Perkins.

I. Project Assumptions

1. The proposed roadway will be an urban section, with curbs and storm drain systems. The proposed roadway will be a minimum 10” concrete pavement, 37’ wide from back of curb to back of curb in a nominal 60’ right-of-way. A 5’ sidewalk will be included along both sides of the street, from Midway Road to future Corporate Drive.
2. Improvements to Midway Road are currently in design by others, and construction will likely precede construction of Holford’s Prairie. The intersection will be designed and constructed by others as part of the Midway Road project. The Consultant will coordinate with the designers of the Midway Road project, and design Holford’s Prairie improvements to connect to that project.
3. It is assumed that the right-of-way necessary for the realignment of Holford’s Prairie Road at Midway Drive will be acquired as part of the Midway Drive project.
4. The City must acquire a number of easements, right-of-way parcels and entire parcels. It is understood that the City will acquire those easements and parcels, so no right-of-way or easement acquisition efforts are a part of the scope of this agreement. Easement and right-of-way exhibits, and ALTA land title surveys will be prepared for use in the acquisition of these parcels.
5. The City also has design underway for a 36” force main along the east side of Holford’s Prairie Road. The Consultant will coordinate with the City and with the designer of that force main with respect to that project, and to the extent practical will make use of available geotechnical and subsurface utility data for use on this project. The force main project will be incorporated into the construction documents for the Holford’s Prairie Reconstruction. It is assumed that the force main designer will provide, at a minimum, the following information:
 - Coordination effort with regard to the design of the force main and the Holford’s Prairie storm drain and utilities
 - Cad files depicting the proposed design

- Final construction plans in pdf format for inclusion in bid documents (to be bound separately)
 - Technical specs and quantities for inclusion in bid documents, in MS Word, MS Excel and pdf format as appropriate
 - Cost estimates for the force main work
 - Construction support with respect to the force main, as needed
 - Record drawings based on construction information provided by the City Inspector.
6. The Consultant will coordinate with the City's design consultant on Corporate Drive to determine pavement elevations and temporary tie-in locations at the southern end of the project.
 7. Midway Branch intersects the project in the vicinity of the Eagle Ridge Mobile Home Park. Midway Branch is a shallow stream that is designated as a Zone A (no detailed study, no Base Flood Elevations) flood hazard area by FEMA, and has a broad floodplain in the vicinity of the project. The existing culvert is clearly significantly undersized. It functions much like a low water crossing at this time. The 100-year storm under fully developed conditions is approximately 4,000 cfs. Immediately downstream of Holford's Prairie Road, Midway Branch flows in a small channel through the Oak Tree Estates Mobile Home Park. The approximate floodplain shown on the FEMA maps encompasses the entire mobile home park, but it does not appear to have a drainage easement through it. On the east side of Holford's Prairie Road is the Eagle Ridge Mobile Home Park, with its sole entrance very near the creek crossing. The stream channel is small and the overbank area is wide and flat. The stormwater in Midway Branch will be conveyed under Holford's Prairie Road in a multiple box culvert per the PDR. We have estimated that approximately 500' linear feet of channel improvements, some of it concrete, will be required.
 8. The Preliminary Design Report outlines the following design parameters for the project:
 - Move the roadway to the west through the reverse curves (see attached exhibit). This will be necessary in order to reconstruct the entrances to both mobile home parks to make the transition grades work, and maintain traffic through the construction area, since there are three mobile home parks with no other access than Holford's Prairie Road.
 - Acquire up to seven lots in the Oak Tree Estates MHP.
 - Because the entrance to the Eagle Ridge MHP is located so close to the creek crossing, we recommend modifying that entrance to follow the existing Holford's Prairie south to intersect with the new Holford's Prairie across from the entrance to Oak Tree Lane. As a result, approximately 300 linear feet of Oak Tree Lane and approximately 350 linear feet of Holford's Prairie/Eagle's Ridge entrance will need to be reconstructed in order to make the grades work.

- Because of the widened channel and culverts, it will be necessary to modify the existing 12” sanitary sewer that crosses Midway Branch by relocating approximately 200’ of that sanitary sewer line.
 - Either a bridge or a multiple box culvert could be used to convey Midway Branch. Based on the PDR, the City staff has elected to proceed with the design as a culvert rather than a bridge.
 - Midway Branch has been identified as Waters of the United States, subject to the jurisdiction of the Corps of Engineers under the Clean Water Act, and several small wetland areas were identified within the project limits.
9. Given the likelihood that a number of mobile homes will be acquired, two neighborhood meetings are assumed and described below.
 10. No asbestos testing or remediation, and no Phase I Environmental Site Assessment (ESA) associated with acquisition of houses or other structures are a part of the scope of this agreement. The City will contract separately prior to construction to determine if remediation is required.
 11. In addition to acquiring mobile home lots or spaces, it will also be necessary to acquire drainage easements both upstream and downstream of the crossing.
 12. It has been determined that the subject portion of Midway Branch will be considered jurisdictional waters under the purview of the Clean Water Act, administered by the Corps of Engineers. Both jurisdictional waters and isolated wetlands have been identified within the project limits. It is expected that the project can be designed to fall within the threshold that can be permitted as a Nationwide Permit and will not require an Individual permit. A Jurisdictional Waters Delineation will be prepared to specifically define the limits of both wetlands and jurisdictional waters. In addition, a Threatened and Endangered Species Letter will be prepared to submit with the LOMR. The Consultant cannot guarantee authorization of the project by the Corps of Engineers. Permit authorization is not a condition of payment for services rendered.
 13. It is assumed (and expected) that no mitigation will be required as part of the Corp of Engineers Nationwide Permit.
 14. No materials testing during construction is a part of the scope of this agreement.
 15. No landscaping or irrigation design is a part of the scope of this agreement. The plans will show sod or hydromulch or other ground cover, to be maintained by the Contractor until maintenance responsibilities revert to the City.
 16. No additional geotechnical investigation will be completed in this phase of the work. We understand that the City has some geotechnical data within the project limits, and we will obtain that information and couple it with the investigation done as part of the PDR.

II.A. Design Survey

1. Horizontal and vertical control for the project was established as part of the PDR based on existing GPS Control Monuments S33 and S13 on Midway Blvd., provided by the City of Lewisville and verified by the Consultant. Permanent benchmarks shall be

established at strategic locations in the focus area for use during the design and future construction phases of the project, such that all portions of the project are within 300 feet of a benchmark. Benchmarks will be shown on the plan and profile sheets where possible. Control lines, base lines and survey lines shall be shown on the plan and profile sheets with monument descriptions. Monuments and offsets shall be set at maximum spacings of 400 feet and at all PC's, PI's, PT's, angle points and other key points.

2. The design survey completed as part of the PDR was limited to the focus area of that portion of the project. This phase will consist of completing the design survey for the remainder of the project. The survey shall identify topography, visible features and above ground improvements including curbs, pavement, buildings, fences, sidewalks, utilities, all trees, landscaped areas and other pertinent features outside the previously completed focus area as necessary for engineering design. Coverage will extend at least 20-feet beyond the proposed right-of-way and Midway Branch where accessible to integrate the design with the adjacent properties, including driveways and sidewalks.
3. Provide a Base Map with Triangular Irregular Network (TIN) and contours of the project area in AutoCAD format for project design.
4. Prior to any surveying on private property, the Consultant will obtain a right of entry letter from the property owner and/or tenant.

II.B. Subsurface Utility Engineering.

The following represents the general understanding between the City and Consultant regarding the basis and/or limitations under which these subsurface utility designating and/or locating services are provided:

1. These services will be conducted and provided in general compliance with CI/ASCE 38-02 (Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data). This standard establishes and defines four quality levels for data collection that are briefly described as:
 - Quality Level D (QL-“D”) – Generally QL-“D” indicates information collected or derived from research of existing records and/or oral discussions.
 - Quality Level C (QL-“C”) - Generally QL-“C” indicates information obtained by surveying and plotting visible above-ground utility features and by using professional judgment in correlating this information to QL-“D” information. Incorporates QL-“D” information.
 - Quality Level B (QL-“B”) – Generally QL-“B”, also known as “designating” indicates information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. Quality level B data should be reproducible by surface geophysics at any point of their depiction. This information is surveyed to applicable tolerances defined by the project and reduced onto plan documents. Incorporates QL-“D” & QL-“C” information.
 - Quality Level A (QL-“A”) - Generally QL-“A”, also known as “locating”, indicates the

precise horizontal and vertical location of utilities obtained by the actual exposure (or verification of previously exposed and surveyed utilities) using “test holes” and subsequent measurement of subsurface utilities, at a specific point. Incorporates QL-“D” QL-“C” & QL-“B” information.

2. These services are for the purpose of aiding the design of the subject project by providing information related to subsurface utilities in order to allow potential utility conflicts to be minimized or eliminated.
3. The Consultant will provide services that meet the standard of care for existing subsurface utility location and mapping as established in CI/ASCE 38-02 by exercising due diligence with regard to records research and acquisition of utility information, including visually inspecting the work area for evidence of utilities and reviewing the available utility record information from the various utility owners. However, the Consultant makes no guarantee that all utilities can or will be identified and shown as there still may be utilities within the project area that are undetectable or unknown.
4. Facilities that are discovered through field investigative efforts by the Consultant but for which no plan records or ownership data can be identified will be hereafter referred to as “unknown” utilities. As part of these services, the Consultant will provide QL-C information in the project deliverables for all unknown utilities that may be identified in the field investigation of the project. Designating and/or locating unknown utilities will typically not be part of the initial scope of work but depending on the client’s needs can be added as additional work to address concerns of the project impacts of “unknown” facilities.
5. Ground penetrating radar will not be used as a part of the field investigation of the project site unless that use has been specifically addressed with the scope of services described herein.
6. Test holes are very limited in size or diameter (typically 12 inches by 12 inches, or approximately 144 square inches). Given this limited size, some subsurface conditions may prevent the completion of test holes, including rock(s), groundwater, large roots, other utilities & structures, etc. Test Hole attempts which cannot be completed due to site conditions will be documented and noted on the plans.
7. When test holes are used to locate utilities, the nominal pipe sizes of the targeted utility will be documented and reported by using field measurements of the outside diameter (OD) of the pipe (to the nearest inch). Based upon this field measured OD, the nominal pipe size will be determined using typical pipe wall thickness data and other available data including record information. Pipe diameters that are too large for measurement, encased or non-encased conduit duct banks and other concrete encased systems which cannot be adequately measured will be reported based upon the best available information.
8. The documented results produced by these services represent a professional opinion and interpretation based upon record information and/or field evidence. These results may be affected by a variety of existing site conditions, including soil content, depth of the utility, density of utility clusters, and electro-magnetic characteristics of the targeted utilities. Also, the lack of and/or poor condition of a trace wire for non-conductive

materials such as PVC, HDPE, etc. in most cases will make the successful detection and location of the utility unlikely.

9. The Consultant will apply professional judgment to determine which utilities require additional field effort and/or methods to properly designate and/or locate, most commonly when record drawings are not available. In such cases, the Consultant will provide a recommendation or request for additional services to the Client. Among other methods, a detectable duct rodder or other conductor may be introduced into the line to enable the designation of the utility. This method is dependent upon approval by the utility owner, as well as access to, size and condition of the utility.
10. None of these services are intended to and should not be understood to relieve the City or others from the responsibility to comply with the statutory requirements related to notifying the proper one-call system(s) in advance of any and all excavation, grading and/or construction within the project site.

The specific scope of subsurface utility designating and/or locating services for this project is described below. Survey services to tie utility crossing marks and/or identifiers placed during the subsurface utility designating and/or locating effort will be provided in this contract.

1. Quality Level 'B' through 'D' Utility Information & Designation – TNP will provide utility information, up to QL-“A”, for the project site, as follows (see attached Vicinity Map):
 - **Full SUE From: SH 121 Business to the southeast corner of Metro Auto Auction property - (2,200' +/-)**
 - **Full SUE along Eagle Ridge Mobile Home Park – (150' +/-)**

This work includes:

- a. Requesting utility records on all crossing utilities from the City, public utilities and private utility companies known to provide service within the project area, as well as other sources, in an effort to develop a comprehensive inventory of utility systems likely to be encountered. Record documents may include construction plans, system diagrams, distribution maps, transmission maps, geographic information system data, as well as oral descriptions of the existing systems. Record information will not be used as a substitute for field location methods unless it is determined to be the most appropriate method for depicting the utilities at the site. The depiction of utilities from records (QL-“C” or “D”) will be based on thorough field and office activities and shall be based on the most reliable indication of position available.
- b. Investigating all utility systems shown on the record drawings that are included within the project site. Visible surface features and appurtenances of subsurface utilities found within the project site will also be evaluated. Using appropriate surface geophysical methods, TNP will search for detectable indications of the location of anticipated subsurface utilities.
- c. Marking all locations that can be validated, using paint, flags or other devices.

- d. Preparing documentation of the utilities encountered and marked, including their general location, orientation, type & size, if known.
2. Quality Level A Utility Test Holes – TNP will excavate by air-vacuum or other minimally invasive methods up to 15 Test Holes, at locations yet to be determined within the project limits in order to identify the exact horizontal & vertical locations of crucial utilities. Also, if locating the end of casing is requested the cost will be based on an hourly charge based on the fee schedule below. This work includes:
- a. Providing all necessary personnel, equipment, supplies, management and supervision needed for the test hole excavation, backfill and restoration.
 - b. Coordinating with City, property owner, and/or permitting authorities, as needed and obtaining any required permits, permission or rights-of-entry with help from The City
 - c. Contacting the appropriate one-call system to request utilities to be marked on-the-ground prior to beginning excavation of test holes.
 - d. Providing and utilizing appropriate traffic control devices, as necessary, in conformance with the MUTCD, including any state or locally adopted supplements (if closures or additional traffic control equipment are needed other than signs and cones additional direct expenses will be charged).
 - e. Preparing documentation for each test hole attempted. This documentation will include the horizontal and vertical position of the targeted utility or structure, a general description of the target utility, with condition, material and general orientation noted, a generalized description of the material encountered in the test hole, and any other field observations noted during the excavation.
3. Additional services shall be considered additional work beyond the scope of services provided herein. Fees for additional services will be negotiated based on the additional work. Additional Services may include, but are not necessarily limited to the following:
- a. Work beyond the scope of services provided herein.
 - b. Subcontract charges, photocopies, plan reproduction, computer charges, etc. not associated with the work described in the Scope of Services.
 - c. Number of test holes greater than fifteen (15).
 - d. Test hole depth greater than twelve (12) feet.
4. Deliverables - based on ASCE Standard 38-02 - signed and sealed by a Professional Engineer registered in the State of Texas
- a. Level B – AutoCad DWG 2d file depicting all Sub-surface Utilities Designated, with a PDF of the same signed and sealed by a Professional Engineer registered in the State of Texas, along with an ACSII point list
 - b. Level A – AutoCad DWG 2d file showing X, Y and Z w/ depth, a PDF of the same signed and sealed, Utility Summary Sheet, Individual Sheets on Test Holes and ASCII point list.

II.C. Construction Plans for Roadway, Culvert, Sewer and Storm Drain

The Consultant shall develop construction plans for review, bidding, construction, inspection and record keeping. These plans will depict the proposed street and drainage improvements, as well as the proposed culvert at Midway Branch. In general, construction plans shall be consistent with normal practice for projects of this nature. The following particulars will apply.

1. The construction plans will consist of plan sheets as follows:
 - a. Title Sheet. The title sheet shall include a location map drawn to a scale of 1" = 1000', approximately ten inches square. It shall also include a sheet index with drawings numbered consecutively and without subscripts. Additionally, the title sheet shall show the project name (Holford's Prairie Road Improvements), project number, date, City logo, Consultant's name, address, and telephone number and other items as may be specified.
 - b. Project Layout Sheet(s). The project layout sheet(s) shall be drawn to a scale of 1" = 200' and laid out with the north arrow pointing to the top of the sheet. The purpose of the project layout is to depict the project in a simplified view. Major items of work should be shown without excessive detail. This sheet(s) may include a listing of abbreviations, legend, general notes, and key map.
 - c. Right-of-Way Strip Map. A map showing all existing and proposed right-of-way and easements, with property owners, will be part of the plans.
 - d. Drainage Area Map and Calculations. A drainage area map will be prepared at an appropriate scale, along with runoff and hydraulic calculations, to support the project design, consistent with the attached exhibit.
 - e. Storm Drain Plan and Profile Sheets. Plan-profile sheets shall be drawn to scales of 1" = 20' h and 1" = 4' v. The plan and profile station will align vertically on the sheet with the proposed centerline drawn parallel to the profile grid. When there is a centerline curvature, the plan-profile will be drawn so that as much of the plan view is in alignment as possible. Plan-profile sheets shall depict all existing and proposed items pertinent to the project. Pavement repair will consist of identifying whole or partial pavement panels to be removed and replaced, to match existing grades. Sidewalks will be replaced at existing grades.
 - f. Street Plan and Profile Sheets. Plan-profile sheets shall be drawn to scales of 1" = 20' h and 1" = 4' v. The plan and profile station will align vertically on the sheet with the proposed centerline drawn parallel to the profile grid. When there is a centerline curvature, the plan-profile will be drawn so that as much of the plan view is in alignment as possible. Plan-profile sheets shall depict all existing and proposed items pertinent to the project. Sheets will depict and show connections to the proposed Midway Road improvements (prepared by others) and will show sidewalk to be constructed on the west side of Holford's Prairie. Plans will also show street light locations, though no electrical plans and no details will be provided for street light construction. Plans will show the location of soil bores and SUE test hole information. A sidewalk will be depicted along both sides of

Holford's Prairie. The sidewalk and appurtenant ramps will comply with Texas Accessibility Standards and the Proposed Right-of-Way Access Guidelines (PROWAG).

- g. Cross Sections. Street cross sections will be shown at 100' intervals throughout the length of the project.
- h. Roadway Grading Plans at Midway Branch. Grading plans will be prepared showing the roadway, channel and embankment grading in the vicinity of Midway Branch and the intersections of the mobile home park entrances. Existing and proposed contours will be depicted, along with grade breaks and information needed to complete the dirt work.
- i. Street and Driveway Profiles. Plan and profile sheets will be prepared to depict each driveway and side street that intersects Holford's Prairie.
- j. Striping and Signing Plans. Plan sheets shall be drawn to an appropriate scale to depict necessary striping and signing, along with appropriate details.
- k. Detail Sheets. The City's standard drawings may be used as a beginning point in developing standard details for this project. They are not to be simply copied, but shall be reviewed and modified for this project. Where other agency standards are used, they shall be reduced as necessary to fit on the City's standard sheet format with complete title block.
- l. Channel Plans. Plan sheets will be prepared to show channel grading for Midway Branch. The channel grading will reflect the hydraulic design for the culvert as determined in the PDR phase and as refined in the final design.
- m. Traffic Control Plans. Plans will be prepared that depict traffic control during construction, and will include signs, markings, detours, road closures, barricades and channelizing devices. The traffic control plans will comply with the Texas Manual of Uniform Traffic Control Devices.
- n. Sanitary Sewer Plan and Profile Sheets. Plan-profile sheets shall be drawn to scales of 1" = 20' h and 1" = 4' v. The plan and profile station will align vertically on the sheet with the proposed centerline drawn parallel to the profile grid. Plan-profile sheets shall depict:
 - i. Existing improvements and physical features;
 - ii. Existing ground profiles;
 - iii. Existing utilities crossing or in close proximity to the proposed improvements, based on public records and field surveys;
 - iv. Proposed utility lines, including the proposed location of manholes and other proposed features of the project, both in plan and profile;
 - v. Proposed location and features of connections to existing utilities;
 - vi. Details of proposed improvements and appurtenances as necessary to define the specific intent/requirements of the proposed design. Standard CITY details will be used and/or revised as appropriate.

- vii. The Consultant will coordinate efforts with the design of the proposed force main currently in design by others.
- o. Miscellaneous. Construction plans will also address demolition, erosion control, street light locations and conduit, water line lowering/adjustments, and other improvements.
- p. Texas Department of Licensing and Regulation. Construction plans will be submitted to a Registered Accessibility Specialist (RAS) for accessibility review in accordance with Texas Department of Licensing and Regulation (TDLR) requirements. The Consultant will have the project registered with TDLR, and will arrange for the plan review and inspection. The Consultant will pay the RAS fees and invoice them as direct expenses.

II.D. Force Main

1. The Consultant will coordinate with the designer of the large force main to be constructed along Holford's Prairie Road (Birkhoff, Hendricks and Carter (BHC)). The proposed force main will be incorporated into the construction plans for this project.
2. The Consultant will obtain force main plans from BHC, and coordinate with them with respect to design conflicts, particularly storm drain.
3. The Consultant will show the force main on the roadway plans.
4. BHC will provide final construction plans in pdf format, along with technical specifications and quantities, for incorporation into final plans.
5. BHC will provide cost estimates for the force main work.
6. The force main plan sheets will be issued for bid with the roadway plans, but will be bound separately.

II.E. Final Construction Plans

The Consultant will provide complete construction plans and technical specifications for use by the City for bidding, construction, inspection and record keeping. Details regarding plan submittal sets are found in Section II.P. Deliverables.

II.F. TxDOT Permits

Improvements within the right-of-way of Bus. 121, at the northern end of the project, will require an Access Permit from TxDOT. Consultant will prepare the necessary documents and exhibits, along with the necessary plan sheets, for submittal to TxDOT. No signal modifications are anticipated since this project does not include additional lanes. No signal design, temporary or permanent, is included in the scope of Basic Services.

II.G. Letter of Map Revision

Improvements at Midway Branch and Holford's Prairie Road will require hydraulic modeling and preparation of a post-construction Letter of Map Revision (LOMR) for submittal to FEMA. No Conditional Letter of Map Revision (CLOMR) is anticipated. The Consultant will:

1. Use hydrology from the PDR and construction plans for the contributing basin, and prepare an exhibit to illustrate the limits of the hydrology
2. Conduct post-construction spot verification of the constructed channel and culvert. It is assumed that this will only be a spot verification, and the construction will be substantially in accordance with the construction plans. In the event that there are significant deviations between the construction plans and the actual construction that would impact the LOMR, additional field survey work and hydraulic modeling may be necessary, and will be beyond the limits of the scope of this agreement. Such additional effort will be conducted as Additional Services.
3. Update hydraulic models from the PDR and final construction plans to include the spot verifications and confirm water surface elevations in the stream both in existing conditions and with proposed improvements
4. Prepare work maps to show cross sections used and to delineate the 100-year water surface both for existing conditions and with proposed improvements
5. Prepare the necessary paperwork, forms and documentation for submittal to FEMA
6. Address FEMA review comments and resubmit
7. Provide the City of Lewisville with the approved LOMR documents.
8. This task will be performed at standard TNP hourly rates, and will be invoiced for man-hours expended on the work. The estimated fee shown on Attachment D will not be exceeded without authorization from the City of Lewisville.

II.H. Environmental Documents

Consultant will use a sub-consultant (Groundwater & Environmental Services, Inc. GES, formerly KBA EnviroScience, LTD.) to prepare environmental documents related to the Midway Branch crossing.

1. A Jurisdictional Waters Delineation will be conducted to identify the limits of the wetlands and jurisdictional waters on the ground. The delineation will be performed in accordance with Corps protocol and will include marking the boundary of the jurisdictional waters with pin flags. The Consultant will tie those pin flags so they can be shown on the plans and exhibits. A report will also be prepared that will include site information, photos, methodology, forms, maps and conclusions.
2. A Preconstruction Notification (PCN) will be prepared and submitted to the Corps of Engineers, assuming that the project can be designed to fall within the threshold that can be permitted as a Nationwide Permit.
3. A Threatened and Endangered Species Report will be prepared in accordance with FEMA requirements for submittal of the LOMR.

II.I Public Meetings

The Consultant will attend up to three neighborhood meetings (open house style) with City staff, to inform the affected property owners and the public of the proposed project and the necessary property acquisitions. The Consultant will prepare exhibits for display and will be prepared to assist City staff in answering questions. The City may elect to replace one

neighborhood meeting for attendance at a City Council workshop/meeting to assist staff with questions.

II.J. Easements and Right-of-Way Documents

Drainage easements, utility easements and public right-of-way are anticipated for this project, along with exhibits necessary for acquisition of mobile home park lots and or sites. No right-of-way acquisition or other right-of-way services are a part of the scope of this agreement. Easements and right-of-way documents will be submitted with the 90% plan submittal.

1. Preparation of seven drainage easements consisting of an Exhibit "A" (Survey Plat) and Exhibit "B" (Legal Description) signed and sealed by a Texas Registered Professional Land Surveyor.
2. Preparation of nine right-of-way documents consisting of an Exhibit "A" (Survey Plat) and Exhibit "B" (Legal Description) signed and sealed by a Texas Registered Professional Land Surveyor. The proposed right-of-way will be monumented with 5/8 inch iron rods with caps stamped "TNP" set at all corners, PC's, PT's and angle points.
3. Preparation of sixteen temporary construction easements consisting of an Exhibit "A" (Survey Plat) and Exhibit "B" (Legal Description) signed and sealed by a Texas Registered Professional Land Surveyor.
4. Preparation of seven ALTA/ACSM Land Title Surveys signed and sealed by a Texas Registered Professional Land Surveyor.
5. Preparation of 6 Slope Easements consisting of an Exhibit "A" (Survey Plat) and Exhibit "B" (Legal Description) signed and sealed by a Texas Registered Professional Land Surveyor.

II.K. Construction Staking

During the construction phase, the Consultant shall provide design baseline, horizontal and vertical control. Consultant shall verify and re-establish monuments. Construction staking for street, storm drainage, water, and sanitary sewer improvements on Holford's Prairie will consist of stakes set at 50-foot intervals with 10-foot (or other appropriate) offsets to back of curb or centerline of pipe and proposed grades to top of curb or flow line marked on stakes including all pipe size changes. Proposed inlets will be staked with two ten-foot offsets from back of curb, with grades. The culvert and headwalls will be staked with offsets. In the event any re-staking will be required, the Consultant requests a 48-hour advance notice of services needed for the purpose of scheduling field crews. Re-staking will be charged to the contractor or be considered Additional Services. The construction staking estimate is based on the following assumed improvements:

1. 3,325 LF of concrete street
2. 2,050 LF of storm drain
3. 10 curb inlets
4. One multi-box culvert with parallel wingwalls
5. 500 LF of trapezoidal channel
6. 200 LF of sanitary sewer line

7. 1,200 LF of slope staking for the roadway embankment.
8. 2,600 LF of force main

II.L. Bidding, Construction, Closure.

1. Bidding – During the bidding phase, the Consultant will assist the City by addressing technical questions, attending a Pre-Bid meeting (if any), and preparing draft addenda for issuance by the City.
2. Construction – The Consultant will not be required to assist the City in evaluating bids, nor will the Consultant be required to attend the bid opening or prepare a bid tabulation. The Consultant will attend the Preconstruction meeting with the City and Contractor. The Consultant's design engineer and/or project manager shall visit the site at least once per calendar month to evaluate the general progress of the construction. Monthly reports shall be prepared and forwarded to the City outlining any deviations noted from the requirements of the contract documents. The Consultant will not be responsible for the contractor's work, nor shall the Consultant be required to perform inspection services. The Consultant will not be responsible for reviewing shop drawings, and will not review contractor pay requests. The Consultant shall assist the City in preparation of field changes and/or change orders, which may become necessary for the orderly completion of the project. The Consultant shall assist the City in performing a final walk-through inspection and prepare a written "final punch list".
3. Closure – The Consultant shall prepare record drawings, incorporating all changes and known variations based on information provided by the City Inspector to provide the City the best possible set of record drawings.

II.M.Deliverables

1. Conceptual, Preliminary and Final Review of Construction Plans
 - a. Conceptual plans will be prepared and submitted at approximately the 30% milestone. The alignment will be based on the PDR alignment, and extended to include the entire limits of the project. Conceptual plans will include the horizontal layout of the street and drainage system and bridge layout, along with preliminary street and storm drain profiles, a report of critical issues, and updated cost estimates.
 - b. Preliminary plans shall be prepared and submitted at approximately the 60% milestone. Preliminary plans will include plan and profile sheets for street and drainage improvements, sufficient for utility adjustments, along with updated cost estimates. The entire drainage system will be profiled, including inlet laterals. Retaining walls, if necessary, will be identified.
 - c. Final plans and technical specifications shall be prepared and submitted at the 90% and 100% milestones, along with updated cost estimates. The 90% submittal will be considered essentially complete, pending addressing any review comments. The 90% submittal will also include the easement and right-of-way exhibits. Bid items shown in the Proposal section of the Bid Documents will be supported by quantity takeoffs per plan sheets. Also, the Consultant may submit

plan sheets or working drawings to the City for review and comment to reduce the number of revisions that otherwise would be required. During development of the plans, the Consultant shall attend meetings as needed.

2. Design Standards– The design of the project shall be in general accordance with the City of Lewisville General Development Ordinance, the City of Lewisville Drainage Criteria Manual and good engineering practices.

During the design phase, the Consultant shall contact various utility companies and obtain information relating to existing utility lines. The consultant shall forward 60% plans to franchise utility companies and obtain comments from them regarding the location and size of their utilities. The design should avoid major utility relocations, where practical. Any water and/or sanitary sewer relocations or adjustments required for storm sewer and paving construction shall be shown in plan and profile. The Consultant will attend City of Lewisville Utility Coordination meetings when appropriate.

3. Prints – The Consultant shall provide prints of construction plans for review and permitting. Two sets of plans will be submitted to the City for each review stage. The Consultant will provide utility companies with copies of 60% plans for review. The City will run prints for bidding and construction.
4. General – Construction plans shall be developed in AutoCad Civil 3D, but can be converted to Microstation if required. Construction plans shall be furnished as a high quality .pdf image. The City's standard format shall be used. All review prints shall be furnished on 22" x 34" sheets. Construction plans shall be suitable for half-scale reduction and shall be provided as follows: one set of 11" x 17" paper originals drawn by laser plotter, and 2 copies. A CD with construction plans in .pdf format will also be provided.
5. Specifications - The Consultant shall prepare technical specifications required for bidding and constructing the project. Only specifications amending or supplementing NCTCOG specifications need to be furnished. Under this section, the Consultant shall also provide a listing of bid items with quantities and construction cost estimates. Specifications, bid items and quantities shall be furnished on hard copy and by electronic file.
6. Record Drawings - The final record drawings shall be furnished on full-size mylar sheets as well as electronic tiff images and cad files.

II.N. Miscellaneous

Miscellaneous services not provided for herein will be paid for under an amendment to this Agreement and for an additional fee.

**ATTACHMENT “C” COMPENSATION
For
Design of Holford’s Prairie Road Improvements
(Between Business 121 Corporate Drive)**

This Attachment “C” further defines the basis of compensation to the Consultant for the services rendered.

I.A. Basic Fee Services – The basic fee for the services as described in Attachment “B” shall not exceed \$238,585 as outlined below, which includes printing, direct costs and computer charges normally associated with production of these services and reproduction of up to fifteen (15) sets of plans for review purposes. It also includes TDLR registration and review fees.

The basis of compensation for Basic Fee services shall be as follows:

ITEM	TASK	TASK DESCRIPTION	FEE
1	C	Phase II – Conceptual Design Phase (30% submittal)	\$45,000
2	C	Phase III - Preliminary Design Phase (60% submittal)	\$80,000
3	C	Phase IV – Final Design Phase (90% submittal)	\$41,000
4	C	Phase V – Final Design Phase (100% complete)	\$33,300
5	K	Phase VI - Bidding, Construction, Closure (Hourly)	\$39,285
		TOTAL BASIC SERVICES	\$238,585

Items (1) through (4) above will be billed monthly based on percent completion of the design tasks and may include partial payments of the total amounts designated for each of the items. Hourly items are billed on the basis of 3.35 times direct salary rates. Standard rates are as shown on Attachment E.

I.B. Special Services – The fee for the following services as described in Attachment “B” will be \$214,700, which includes printing, direct costs and computer charges normally associated with production of these services.

The following table summarizes special services fees.

TASK	TASK DESCRIPTION	FEE
A	Design Surveys	\$18,000
B	Subsurface Utility Engineering (Level B, C, D)	\$29,500
B	Subsurface Utility Engineering (Level A – 15 test holes @ \$1,800/hole)	\$27,000
D	Force Main Incorporation (Design by Others)	\$ 8,000
F	TxDOT Permit	\$7,800
G	Letter of Map Revision at Midway Branch (Hourly)	\$18,000
H	Environmental Documents <ul style="list-style-type: none"> • Jurisdictional Waters Delineation - \$ 3,300 • Nationwide Permit PCN - \$ 5,000 (Hourly) • Threatened and Endangered Species Letter -\$ 500 	\$8,800
I	Public Meetings (Hourly)	\$5,600
J	Easements and Right-of-Way Documents <ul style="list-style-type: none"> • Temporary Construction Easements (16) - \$1,200 each • Drainage Easements (7) – 1,200 each • Right-of-Way documents (9) - \$1,500 each • ALTA Land Title Surveys (7) - \$1,700 each • Slope Easements (6) -\$1,200 each 	\$60,200
K	Construction Staking (Hourly)	\$31,800
	TOTAL SPECIAL SERVICES	\$214,700

III.C. Miscellaneous Services – The fee for additional services not provided herein, including any services outlined as “Additional Services” in Attachment “B”, will be negotiated based on the scope of work and included in a contract amendment.

The total fee for Basic Services and Special services is \$453,285.

Attachment D
Holford's Prairie Reconstruction
TEAGUE NALL AND PERKINS, INC.
Hourly Billing Rates by Employee Type

Engineering /Landscape Architecture/ROW	Hourly Billing Rate
Principal	\$230
Team Leader	\$210
Senior Project Manager	\$200
Project Manager	\$170
Senior Engineer	\$220
Project Engineer	\$150
Engineer III/IV	\$120
Engineer I/II	\$100
Landscape Architect / Planner	\$125
Landscape Designer	\$100
Senior Designer	\$135
Designer	\$120
Senior CAD Technician	\$110
CAD Technician	\$90
IT Consultant	\$150
Clerical	\$60
Construction Inspector II	\$90
Construction Inspector III	\$105
Senior Construction Inspector	\$120
Construction Superintendent	\$170
ROW Manager	\$150
Senior ROW Agent	\$130
ROW Agent	\$110
Relocation Agent	\$120
Senior Utility Coordinator	\$130
Utility Coordinator	\$120
Intern	\$60
Surveying	
Survey Manager	\$210
Registered Professional Land Surveyor (RPLS)	\$170
Field Coordinator	\$120
S.I.T. or Senior Survey Technician	\$110
Survey Technician	\$95
1-Person Field Crew w/Equipment**	\$125
2-Person Field Crew w/Equipment**	\$160
3-Person Field Crew w/Equipment**	\$180
4-Person Field Crew w/Equipment**	\$200
Flagger	\$40
Abstractor (Property Deed Research)	\$85
Subsurface Utility Engineering (SUE)	
SUE Project Manager	\$185
SUE Engineer	\$160
Sr. Utility Location Specialist	\$100
Utility Location Specialist	\$85
1-Person Designator Crew w/Equipment***	\$120
2-Person Designator Crew w/Equipment***	\$145
2-Person Vac Excavator Crew w/Equip (Exposing Utility Only)	\$250 (4 hr. min.)
2-Person Vac Excavator Crew w/Equip for QL-A ****	\$450 (4 hr. min.)
Core Drill (equipment only)	\$750 per day

All subcontracted and outsourced services shall be billed at rates comparable to TNP's billing rates above or cost times a multiplier of 1.10.

*** Survey equipment may include truck, ATV, Robotic Total Station, GPS Units and Digital Level.*

**** Includes crew labor, vehicle costs, and field supplies.*

***** Rate applies to Quality Level A (QL-A) test holes on utilities that were designated by TNP as QL-B.*

Holford's Prairie Reconstruction
TEAGUE NALL AND PERKINS, INC.
 Hourly Billing Rates by Employee Type

Direct Cost Reimbursables

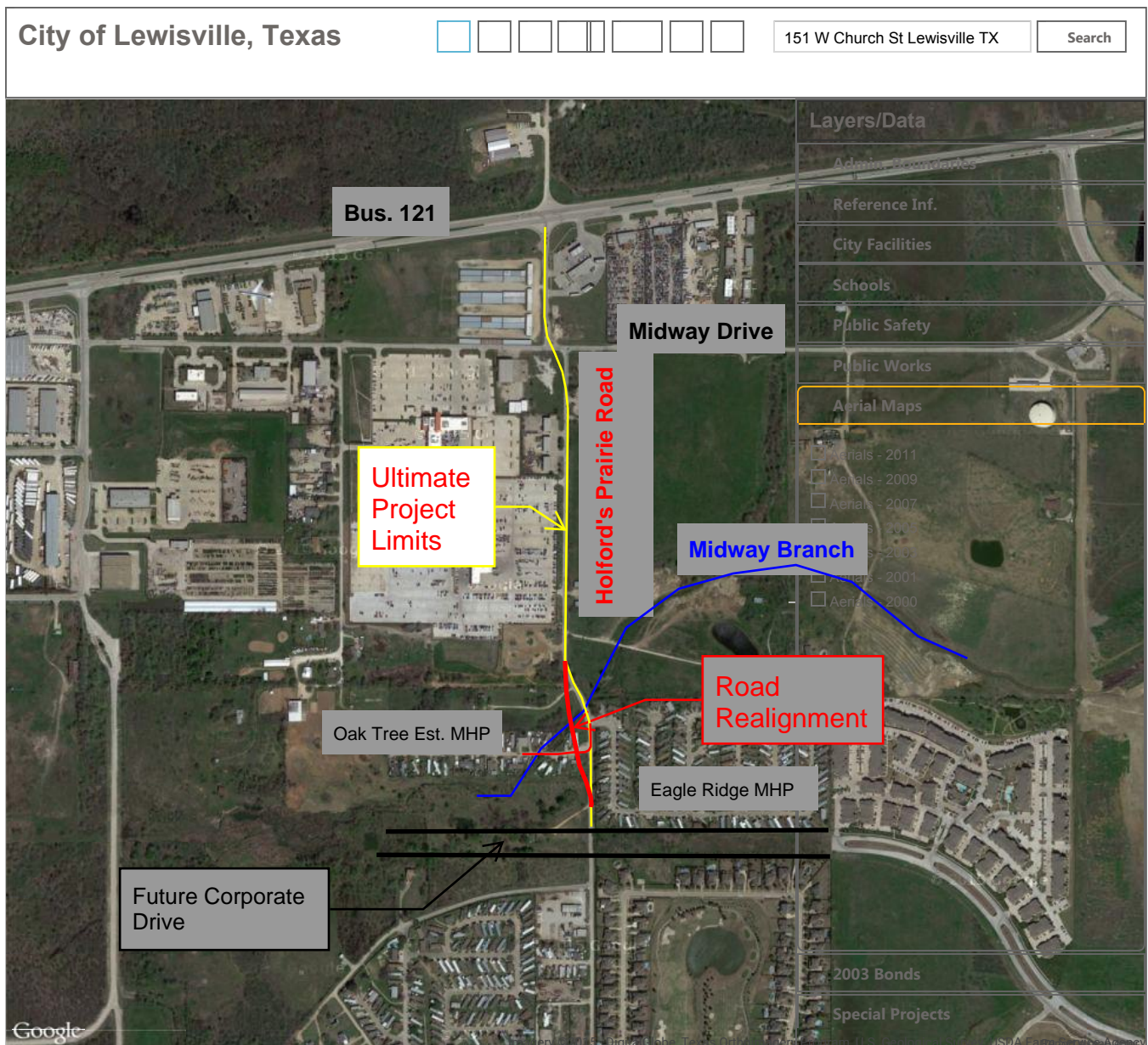
Photocopies:	\$0.154/sf \$0.7701/sf	letter, legal and 11" x 17" size bond paper, B&W letter, legal and 11" x 17" bond paper, color
Prints:	\$0.154/sf \$0.7701/sf	letter, legal and 11" x 17" bond paper, B&W letter, legal and 11" x 17" bond paper, color
Plots:	\$0.154/sf \$0.7701/sf \$0.50/sf \$1.00/sf	letter, legal and 11" x 17" bond paper, B&W letter, legal and 11" x 17" bond paper, color 22" x 34" and larger bond paper or vellum, B&W 22" x 34" and larger mylar or acetate, B&W
Mileage	\$0.545/mile	
Plans on CD	\$20/each	

Attachment E

Holford's Prairie Road Reconstruction

City of Lewisville

ID	Task Name	Duration	Start	2019	2020	2021
1	Design Survey	6 wks	Mon 10/1/18	Oct		
2	30% Plans	8 wks	Mon 11/12/18			
3	City Review	2 wks	Mon 1/7/19			
4	ALTA Surveys	5 wks	Mon 1/21/19			
5	60% Plans	12 wks	Mon 1/21/19			
6	City Review	2 wks	Mon 4/15/19			
7	ROW & Easement Doc	5 wks	Mon 3/25/19			
8	90% Plans	8 wks	Mon 4/29/19			
9	City Review	2 wks	Mon 6/24/19			
10	100% Plans	5 wks	Mon 7/8/19			
11	Easement & ROW Acquisition (By City)	4 mons	Mon 4/29/19			
12	Bid & Award	2 mons	Mon 8/19/19			
13	Construction	15 mos	Mon 10/14/19			
14	LOMR	4 wks	Mon 12/7/20			



Holford's Prairie Reconstruction Project
Attachment F